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10/790,483

03/01/2004

Michael J. Hurkes

34431

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03/09/2007

HOVEY WILLIAMS LLP

2405 GRAND BLVD., SUITE 400

KANSAS CITY, MO 64108

EXAMINER

LEYSON, JOSEPH S

ART UNIT

PAPER NUMBER

1722

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/790,483

Applicant(s)

HURKES, MICHAEL J.

Examiner

Joseph Leyson

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-24 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All previous objections and/or rejections are withdrawn in view of Applicant's response filed on December 5, 2006, if NOT restated below.

Specification

2. The amendment filed October 15, 2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the amendment to paragraph [019] which changes the model number of the cutter; and the amendments (both occurrences) to paragraph [023] which change the number of pulses per revolution.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the subject matter of claim 15; and the subject matter of claim 23.

Claim Objections

4. Claims 19 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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Claims 19 and 20 only further disclose materials to be worked upon by the claimed apparatus, and does not further recite structure or structural relationships. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP 2115. Claim 19 only further recites the material to be worked upon which does not further limit the structure of the apparatus of claim 18. Further, note that claim 20 just recites what happens when the apparatus is used. The variable speed recited by claim 20 is caused by the material to be extruded, i.e., there is no extra structure which causes the variable speed. There is no change in structure in the claimed apparatus between claims 18 and 20.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 9-12 rejected under 35 U.S.C. 102(b) as being anticipated by Duis (U.S. Patent 1,960,773).

Duis (U.S. Patent 1,960,773) teaches an apparatus including an extruder 1, 2 for extruding an extrudate 3, an extrudate speed detector 5 having a speed-indication output, the extrudate speed detector 5 coupled to the extruder 1, 2 through the extrudate 3, and a servo-controlled cutter 23 coupled to the speed-indication output of the extrudate speed detector 5, wherein the cutter 23 travels at substantially the same speed as the extrudate 3 to ensure a straight cut across the extrudate 3 (p. 1, col. 1, to p. 2, col. 2, line 110) (which enables the servo-controlled cutter to cut an inelastic extrudate portion without communicating imperfections to an elastic extrudate portion as the extrudate is extruded, as understood from the instant specification). The extruder 1, 2 includes an extrusion die 2 with a generally rectangular cross-sectional configuration (i.e., fig. 1) and/or a hollow-core configuration 65, which configuration is capable of being a railing piece. As to the recitations, such as "for manufacturing composite lumber" and "for extruding initially heated composite materials", such recitations relate to the intended use of the claimed apparatus and are not positively claimed. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987); see MPEP 2114. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the

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claims." In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP 2115.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duis (U.S. Patent 1,960,773) in view of Giles (U.S. Patent 4,088,430).

Duis (U.S. Patent 1,960,773) discloses the apparatus substantially as claimed as mentioned above, except for the extrudate speed detector including an encoder wheel or an optical speed detector, the speed-indication output including a pulse output, or the pulse output being coupled to the servo-controlled cutter using at least one electrical conductor, as respectively recited by instant claims 13-15.

Giles (U.S. Patent 4,088,430) discloses an extrudate speed detector including an encoder wheel 52, an optical speed detector 81, 82, a pulse output having a frequency correlated to the extrusion rate, wherein the pulse output is coupled to a servo-controlled cutter 85 using at least one electrical conductor 84 (i.e., col. 6, lines 9-32).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to replace the speed detector of Duis (U.S. Patent 1,960,773) with the speed detector of Giles (U.S. Patent 4,088,430) because both speed detectors are art recognized alternatives for detecting extrudate speed.

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9. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duis (U.S. Patent 1,960,773) in view of Dahl et al. (U.S. Patent 6,153,293).

Duis (U.S. Patent 1,960,773) discloses the apparatus substantially as claimed as mentioned above, except for the cutter being a cutoff saw or a flying knife.

Dahl et al. (U.S. Patent 6,153,293) discloses a cutoff station 32 which includes a cutoff saw or a flying knife for cutting an extrudate (i.e., col. 6, lines 18-24).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to replace the cutter Duis (U.S. Patent 1,960,773) with a cutoff saw or a flying knife because such a cutoff saw and flying knife are an art recognized alternative cutters for cutting extrudate, as disclosed by Dahl et al. (U.S. Patent 6,153,293).

10. Claims 18-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahl et al. (U.S. Patent 6,153,293) in view of Goforth et al. (U.S. Patent 5,088,910) and Duis (U.S. Patent 1,960,773).

Dahl et al. (U.S. Patent 6,153,293) disclose a composite lumber extrusion line for producing composite lumber materials including an extruder 26 operable to produce an extrudate having substantially uniform cross-sectional dimensions, a servo-driven cutter 32 including a movable table or flying knife or cutoff saw (col. 6, lines 18-24), and a spray bath 30 positioned in the extrusion line between the extruder 26 and the servo-driven cutter 32, the spray bath 30 being adapted to cool the extrudate from a heated plastic condition to a cooled hardened condition prior to being cut by the servo-driven cutter 32. The composite lumber materials include cellulose 18. And the extrusion line

does not include a puller. However, Dahl et al. (U.S. Patent 6,153,293) does not disclose variable speed extrusion, an extrudate speed detector coupled with the extruder operable to transmit an extrudate speed indication associated with the speed of the extrudate, the servo-driven cutter including a clamp and a table-travel-speed input, or the servo-driven cutter coupled to the extrudate speed detector, wherein the movable table moves in relation to the speed of the extrudate.

Goforth et al. (U.S. Patent 5,088,910) disclose a composite lumber extrusion line for producing composite lumber materials including an extruder 36 operable to produce an extrudate and a servo-driven cutter including a movable table with a table-travel-speed input for changing the table speed to accommodate varying speeds of extrudate flow (i.e., figs. 5-7; col. 11, lines 43-45), clamps 136, 138 and a flying knife 80. The moving servo-driven cutter allows the extrudate to be cut into pieces while it is continuously flowing from the extruder 36 without the extrudate on the upstream side of the knife 80 ramming into the knife 80 as a cut is being made (i.e., col. 10, lines 44-47)

Duis (U.S. Patent 1,960,773) discloses an extrusion line including an extruder 1, 2 for extruding an extrudate 3 at variable speed depending upon consistency (i.e., bulk density) of the extrusion materials (i.e., p. 1, cols. 1-2), an extrudate speed detector 5 having a speed-indication output, the extrudate speed detector 5 coupled to the extruder 1, 2 through the extrudate 3 operable to transmit an extrudate speed indication associated with the variable speed of the extrudate, and a servo-driven cutter 23 coupled to the speed-indication output of the extrudate speed detector 5, wherein the cutter 23 receives the speed-indication output as a travel-speed input to make the cutter

23 travel at substantially the same speed as the variable speed extrudate 3 to ensure a straight cut across the variable speed extrudate 3 (p. 1, col. 1, to p. 2, col. 2, line 110).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the cutter of the extrusion line of Dahl et al. (U.S. Patent 6,153,293) with the servo-driven cutter of Goforth et al. (U.S. Patent 5,088,910) because such a modification would enable the cutter to accommodate varying speeds of extrudate, as disclosed by Goforth et al. (U.S. Patent 5,088,910), and to further modify the cutter with the extrudate speed detector of Duis (U.S. Patent 1,960,773) because such a modification would further enable the cutter to accommodate a variable speed extrudate such that the cutter moves in relation to the variable speed of the extrudate, as disclosed by Duis (U.S. Patent 1,960,773).

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahl et al. (U.S. Patent 6,153,293) in view of Goforth et al. (U.S. Patent 5,088,910) and Duis (U.S. Patent 1,960,773) as applied to claims 18-20 and 22-24 above, and further in view of Giles (U.S. Patent 4,088,430).

Giles (U.S. Patent 4,088,430) discloses an extrudate speed detector including an encoder wheel 52, an optical speed detector 81, 82, a pulse output having a frequency correlated to the extrusion rate, wherein the pulse output is coupled to a servo-controlled cutter 85 (i.e., col. 6, lines 9-32).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further replace the speed detector of Duis (U.S. Patent

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1,960,773) with the speed detector of Giles (U.S. Patent 4,088,430) because both speed detectors are art recognized alternatives for detecting extrudate speed.

12. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the change of the model number of the cutter in paragraph [019] does not introduce new matter as one would skilled in the art would readily appreciate that either model CSS 4.5-8 or CSS 6.5-13 may be employed based on the teachings of the originally filed disclosure. As evidenced by the manufacturer's website (<http://www.cdsmachines.com/>), the only difference between the two models is that the CSS 6.5-13 can cut a larger cross-section and has a more powerful motor. Likewise, the amendments to the pulse rates of the encoder wheel in paragraph [023] do not introduce new matter. The specification calls for the encoder wheel of different embodiments of the invention to produce different pulse rates. Thus, the number of pulses per revolution that the encoder wheel can produce is a variable. Based on the teachings of the original disclosure, one skilled in the art would readily be able to ascertain the amended encoder pulse rates. Consequently, the changes to the cutter model number and encoder pulse rates made in Applicant's previous Amendment do not constitute the addition of new matter. The examiner respectfully disagrees. Whether or not one of ordinary skill would appreciate or ascertain that model 6.5-13 can be used or that particularly 4096 and 2048 pulse rates can be used is irrelevant to new matter. Are such particular model number and particular pulse rates explicit, or even

implicit, from the specification as originally filed? The answer is NO. Therefore, such subject matter is NEW MATTER.

Applicant argues that claims 19 and 20 have been amended to be in appropriate dependent form to overcome the objection under 37 CFR 1.75(c). However, the amendments still do not make claims 19 and 20 appropriately dependent, as mentioned above.

Applicant argues that Duis (U.S. Patent 1,960,773), nor any of the other cited references of the prior art rejection, does not disclose or suggest a servo-controlled cutter. The examiner respectfully disagrees. As understood from the specification (i.e., paragraph [022]), a servo-controlled cutter controls the speed of movements of its various parts. Duis clearly discloses means for controlling the speed of the cutter to be substantially the same as the extrudate dependent upon a speed detector 5 (i.e., p. 1, col. 1, to p. 2, col. 2, line 110) which reads on servo-control. Duis even discloses a rheostat or speed controller (i.e., p. 2, col. 2, lines 100-110).

Applicants argues that Duis's drive motor is not a servo motor. However, the instant claims do not require a drive motor which is a servo motor.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JL

[Signature]
ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300/700

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